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XXIV. *An Account of a new Species of Pinus, native of California: in a Letter to Joseph Sabine, Esq., F.R. and L.S., Secretary of the Horticultural Society. By Mr. David Douglas, A.L.S. Communicated by Mr. Sabine.*

*Read November 6, 1827.*

DEAR SIR,

UNDERSTANDING upon my return from North-west America, that considerable interest has been excited by reports of a new species of *Pinus* of gigantic size having been discovered by me in Northern California, I beg permission through you to lay a short account of it before the Linnean Society.

This plant covers large districts about a hundred miles from the ocean, in latitude 43° North, and extends as far to the South as 40°. It first came under my notice in August 1825, while at the headwaters of the Multnomah River. In October 1826 it was my good fortune to meet with it beyond a range of mountains running in a south-western direction from the Rocky Mountains towards the sea, and terminating at Cape Orford of Vancouver. It grows sparingly upon low hills, and the undulating country east of the range of mountains just mentioned, where the soil consists entirely of pure sand, in appearance incapable of supporting vegetation. Here it attains its greatest size, and perfects its fruit in most abundance.

The trees do not form dense forests as most of the other

Pines which clothe the face of North-west America, but like *Pinus resinosa*, which grows among them, they are scattered singly over the plains, and may be considered to form a sort of connecting link between the gloomy forests of the north and the more tropical-like verdure of California.

The trunk grows from 150 to above 200 feet in height, varying from 20 to near 60 feet in circumference. One specimen, which had been blown down by the wind,—and this was certainly not the largest which I saw,—was of the following dimensions.—Its entire length was 215 feet; its circumference three feet from the ground was 57 feet 9 inches; and at 134 feet from the ground, 17 feet 5 inches. The trunk is unusually straight, and destitute of branches about two-thirds of the height; the bark is uncommonly smooth for such large timber, of a light-brown colour on the south, and bleached on the north side. The branches are rather pendulous, and form an open pyramidal head, with that appearance which is peculiar to the *Abies* tribe. The leaves are between 4 and 5 inches long, and grow in fives, with a short sheath like those of *Pinus Strobus*; they are rigid, of a bright-green colour, but not glossy, and from minute denticulations of the margin are scabrous to the touch. The cones are pendulous from the extremities of the branches; they are two years in acquiring their full growth, are at first upright, and do not begin to droop I believe till the second year: when young they have a very taper figure; when ripe they are about 11 inches in circumference at the thickest part, and vary from 12 to 16 inches in length. The scales are lax, rounded at the apex, and perfectly destitute of spines. The seeds are large, 8 lines long and 4 broad, oval; and, like that of *Pinus Pinea*, their kernel is sweet and very pleasant to the taste. The wing is membranous, of a dolabriform figure and fuliginous colour,  
about

about twice as long as the seed ; it has an innumerable quantity of minute sinuous vessels filled with a crimson substance, and forming a most beautiful microscopic object. The embryo has 12 or 13 cotyledons.

The whole tree produces an abundance of pure amber-coloured resin. Its timber is white, soft, and light : it abounds in turpentine reservoirs, and its specific gravity has been ascertained from a specimen brought home by me, to be 0.463. The annual layers are very narrow ; in the above specimen there were 56 in the space of four inches and a half next the outside. The resin, which exudes from the trees when they are partly burned, loses its usual flavour, and acquires a sweet taste, in which state it is used by the natives as sugar, being mixed with their food. The seeds are eaten roasted, or are pounded into coarse cakes for their winter store. I have since my return been informed by Mr. Menzies, that when he was on the coast of California with Captain Vancouver in 1793, seeds of a large Pine, resembling those of the Stone Pine, were served in the dessert by the Spanish priests resident there. These were no doubt the produce of the species now noticed. The vernacular name of it, in the language of the Umptqua Indians, is *Nát-cleh*.

The species to which this Pine is most nearly allied is undoubtedly *Pinus Strobis* ; from which, however, it is extremely different in station, habit, and parts of fructification. I have named it in compliment to Aylmer Bourke Lambert, Esq., a Vice-President of the Linnean Society, whose splendid labours in investigating the genus *Pinus* are too generally known and appreciated to require any eulogium from me.

It only now remains for me to give the distinctive character of the species.

*P. Lam-*

500 Mr. DAVID DOUGLAS on a new Species of *Pinus*.

*P. Lambertiana*; foliis quinis rigidis scabriusculis, vaginis brevissimis, strobilis crassis longissimis cylindricis: squamis laxis rotundatis.

I have the honour to be,

Dear Sir,

Your very obedient Servant,

DAVID DOUGLAS.

Horticultural Society,  
November 1, 1827.